Ms. Marlene H. Dortch Secretary Office of the Secretary Federal Communications Commission 445 12th Street, S.W. Room TW-A325 Washington DC 20554

#### Re: Ex Parte Presentation

In the Matter of: Review of the Emergency Alert System, EB Docket No. 04-296

### Dear Ms. Dortch:

This is to inform you that Anthony M. Rutkowski, VP of Regulatory Affairs and Infrastructure Standards of VeriSign Inc, together with David B. Grootwassink, Dennis J. Amari, and Thomas Linehan (all of VeriSign) met on 22 August 2006 at Commission headquarters with Aaron Goldberger, Bruce Gottlieb, and Angela Giancarlo, advisors respectively in the offices of Commissioners Deborah Taylor Tate, Michael J. Copps, and Robert M. McDowell. In addition, copies of these materials were provided to Catherine Bohigian and Barry Ohlson, advisors respectively in the Offices of Chairman Kevin J. Martin, and Commissioner Jonathan S. Adelstein.

The purpose of these meetings was to provide an overview of current developments associated with the subject proceeding, including potential related actions of the Commission. The attached slides formed the basis of dialogue, and convey the substance of what was discussed.

VeriSign is a globally recognized leader in providing an array of large-scale, ultra-high availability intelligent infrastructure capabilities for traditional voice telecommunications, wireless, Internet, security, financial transaction, and content services to providers and consumers through its various divisions in the U.S. and worldwide. As part of these infrastructure support services, VeriSign provides very large-scale Global Intelligent Short Messaging Service aggregation, mediation, and gateway capabilities among providers to meet their rapidly growing SMS interoperability needs.

VeriSign looks forward to continued collaboration with the Commission in considering matters relating to the subject rulemaking proceeding.

Pursuant to the Commission's rules, this ex parte letter together with presentation notes are being filed via the Commission's Electronic Comment Filing System for inclusion in the public record of the above-referenced proceeding.

## Respectfully submitted,

/s/

Anthony M. Rutkowski Vice President for Regulatory Affairs VeriSign Inc. 21355 Ridgetop Circle Dulles VA 20166-6503 tel: +1 703.948.4305 mailto:trutkowski@verisign.com

cc: Catherine Bohigian Bruce Gottlieb Barry Ohlson Aaron Goldberger

Angela Giancarlo



Offices of Commissioners Copps, Tate, and McDowell

Federal Communications Commission Washington DC 22 August 2006

# Feasibility of a SMS-Based Trusted Third Party National EMS Solution

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Where it all comes together.

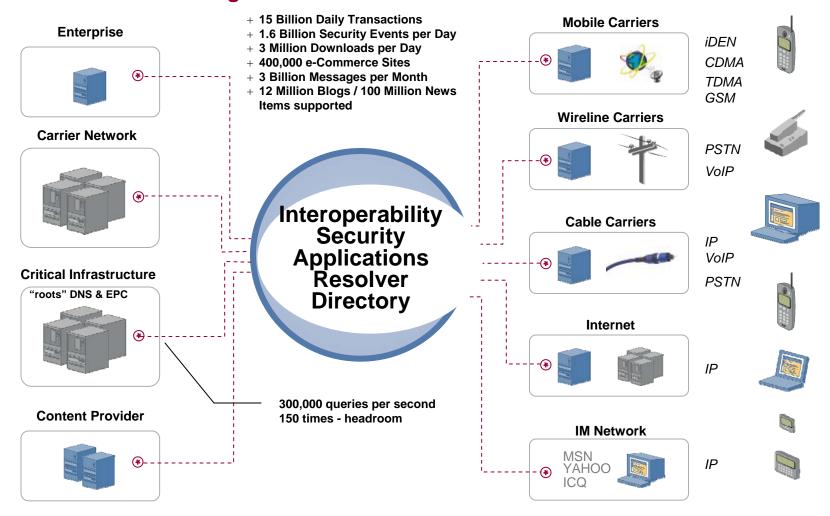
# About VeriSign

- Largest "provider's provider" supplier of Intelligent Infrastructure to enable secure ubiquitous communications, content and commerce
  - Communications infrastructure
    - Largest provider of independent telephony signalling infrastructure in North America and extended worldwide
    - Largest provider of intelligent short messaging mediation and gateway services worldwide (2 GigaMessages per month, 275 direct carrier interconnects, 390 global peer carrier interconnects)
    - Provider of wireless roaming mediation and billing
    - Provider of content verification and management services
  - Intelligent secure, massively scalable data bases
    - Provides key Internet DNS servers
      - "the root"
      - COM and NET servers and domain registries
    - Provides key RFID object supply chain server
      - "the Electronic Product Code root"
  - Security
    - Largest supplier of PKI digital certificates worldwide
    - Provides key certificate repudiation server
    - Largest provider of CALEA Trusted Third Party capabilities
    - Provides iDefense threat analysis and managed security services



# About VeriSign

## **Intelligent Infrastructure Services**



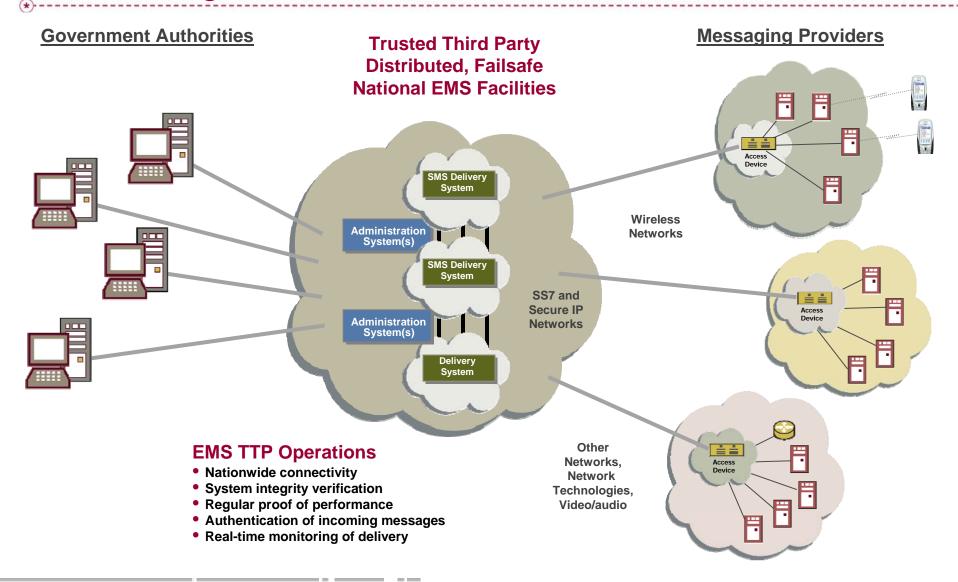


## What can be implemented now

- + Ability of a Trusted Third Party Intelligent Infrastructure provider
  - to receive and authenticate text messages from government authorities that are distributed as messages to CMRS users in designated geographical locations
    - Delivery to provider facilities
      - Norm: 8,000 messages per second (500,000 per minute)
      - Current maximum: 15,000 messages per second (1 million per minute)
      - 3-6 month timeframe: could be increased 10 times (to 10 million per minute) with significant additional resources
      - Increases must include optimizing interfaces to carrier facilities
      - Alternative routing through SS7 to switches may relieve bottlenecks
    - Geographic targeting
      - Norm: geographic approximations based on area codes and switching center locations
      - 6 month timeframe: granularity could be enhanced using additional integrated, new high performance ENUM/E.115v2 resolution capabilities
    - Architecture
      - Distributed redundant, secure, high-availability "engine" sites
  - to send messages to users of other services
    - Translate and deliver to providers where there gateways and geographic information is sufficiently available



# An Intelligent Infrastructure TTP architecture





# What can be implemented in the "near future"

- Broader array of emergency message initiators
  - Inclusion of state and local government officials and events
  - Improved Identity Management including opt-in capabilities
  - Greater array of emergency messages
- Greater diversity of services, media, and displays
  - CAP (Common Alerting Protocol) based messages
  - Multimedia messages on handsets and other devices
  - Larger message sizes
- Improved delivery performance
  - > 10 fold increase in TTP platforms (> 10 million per minute)
  - Higher performance CMRS cell broadcast platforms to reduce local bottlenecks
  - Emergency priority network services to capture more resources
- Geographic or other criteria-based targeting
  - Ultra high performance "resolution engines"
    - > 1 million queries per second
  - Improved granularity and nomadic coverage
    - Near real-time location resolutions less than 100 feet
  - Identity management (IdM) directory, presence, and availability capabilities
    - Ability to reach specific user groups (professions, etc) under with user-defined options
- More integrated and global infrastructure
  - Next Generation Network (NGN) standards implementation
    - Emergency and Priority Services
    - Security requirements
    - Identity Management



# Why this is the right solution

- Implements substantial messaging capabilities immediately
- Leverages existing national intelligent infrastructure and operational agreements
  - Basic capabilities were implemented to support rapidly growing SMS, SMS-IM, SMS-IM, MMS, commerce and content marketplace
  - Capabilities regularly tested for prime-time TV shows
- Minimal effect on existing carrier networks and installed handset base
- Cost effective
  - Sensitive to concerns of rural and underserved area providers
- + Neutrality among all providers and platforms
- Highly robust substantial survivability and "availability"
- + Readily scaleable and extensible
  - with investment
  - as new capabilities and platforms become available



## Implementation options

- + Provider designation
  - Initial designation of national EMS TTP provider
  - Subsequent RFP process
- + Rules of use and inclusion, including State and local jurisdictions
  - Who initiates messages
  - Granularity and levels of emergencies
  - Who is included in delivery and on what basis
- + Funding
  - Special appropriation
  - Existing DHS funds
  - Universal Service Fund
- + Evolution
  - Establish multi-agency R&D programs
  - Integration with global EMS standards and operational arrangements
  - Industry collaboration on gateway features and performance

